

Research of the Best Method in Rice Amylose Content Determination by Flow Injection Analysis¹

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Abstract

To establish the best method of amylose content determination by flow injection analysis(FIA), sample pre-treatment and the mode in FIA were analyzed. The result showed that sample pre-treatment including defat and separation temperature influenced the value of amylose content in different rice varieties. The value of amylose content was more accurate and higher in treatment of defat and cold separation. It showed more feasible and stable in 45 s of full-time, 15 s of injection-time, and 40 ml of sample volume of FIA system mode. The result also indicated that defat and cold starch separation were necessary in amylose content determination of waxy, japonica rice, and indica rice.

Key words: Rice, Amylose, Flow injection analysis, Iodine colorimetry.

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